(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织 国际局



PCT

(43) 国际公布日: 2004年2月26日(26.02.2004)

(10) 国际公布号: WO 2004/017658 A1

(51) 国际分类号7:

H04Q 7/38, H04L 29/06

(21) 国际申请号:

PCT/CN2003/000642

(22) 国际申请日:

2003年8月7日(07.08.2003)

(25) 申请语言:

中文

(26) 公布语言:

中文

(30) 优先权:

02139362.1

2002年8月15日(15.08.2002)

CN

(71) 申请人(对除美国以外的所有指定国): 西安西电捷通 无线网络通信有限公司(CHINA IWNCOMM CO. LTD) [CN/CN]; 中国陕西省西安市高新二路12号协 同大厦4F.C座, Shanxi 710075 (CN)。

(72) 发明人;及

(75) 发明人/申请人(仅对美国): 张宁(ZHANG, Ning) [CN/CN]; 万晓辉(WAN, Xiaohui) [CN/CN]; 中国陕 西省西安市高新二路12号协同大厦4F.C座, Shanxi 710075 (CN).

(74) 代理人: 中国专利代理(香港)有限公司(CHINA PATENT AGENT (H.K.) LTD.); 中国香港湾仔港湾 道23号鹰君中心22字楼,Wanchai, Hong Kong Special Administrative Region (CN).

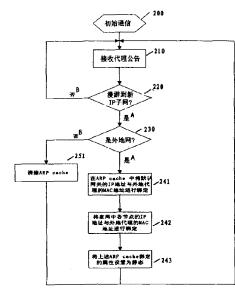
- (81) 指定国(国家): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, ĆA, ĆH, ĆN, ĆO, ĆR, ĆU, ĆZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
- (84) 指定国(地区): ARIPO专利(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI专利(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

本国际公布:

包括国际检索报告。

所引用双字母代码和其它缩写符号, 请参考刊登在每期 PCT公报期刊起始的"代码及缩写符号简要说明"。

- (54) Title: CROSS-IP INTERNET ROAMING METHOD FOR MOBILE TERMINAL
- (54) 发明名称: 实现移动终端跨IP网际漫游的方法



- 200...INITIALIZING COMMUNICATION
- 210...RCEIVING THE AGENT'S NOTIFICATION 220...ROAMING TO A NEW IP SUBNET? 230...FOREIGN NETWORKS?
- ...BINDING THE IP ADDRESS OF THE DEFAULT GATEWAY TO THE MAC ADDRESS OF THE FOREIGN AGENT IN THE ARP CACHE
 242...BINDING THE IP ADDRESS OF EACH NODE
- IN THE HOME NETWORKS TO THE MAC ADDRESS OF THE FOREIGN AGENT
- SET THE BINDING ATTRIBUTE OF THE ARP CACHE TO BE STATIC
- 251...CLEANING THE ARP CACHE
- A... YES B... NO

(57) Abstract: An active Address Resolution Protocol is used in the present invention, and thus a method is achieved which allows the mobile terminal to roam in different IP networks without modifying the routing entry of the mobile terminal, and therefore enables the conventional TCP/IP protocol to support the mobility. When determining that it has roamed to a foreign network by receiving the notification of the foreign agent, the mobile terminal would perform the active address resolution protocol so as to bind the MAC address of the foreign agent (8) to the IP address of default gateway of the mobile terminal (5) in the ARP cache, and the mobile terminal would set its attribute static when modifying the ARP cache. When determining it has returned to the home networks from the foreign networks, the mobile terminal would clear the ARP cache, thereafter it would establish an ARP cache table in accordance with the normal ARP operation, resume the attribute of the ARP cache to be dynamic and perform the normal transmission and reception of IP data.